The E-Government Geospatial One Stop (GOS) Development and NIMA Plan for Participation

NIMA STO

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Introduction

Purpose of the Briefing is to:

- Ensure a consistent understanding of e-Gov Geospatial One Stop (GOS)
- Provide a consistent understanding of Roles and Responsibilities wrt GOS
  - Across NIMA
  - Across DoD

Background:

- Executive Branch has embraced e-Government generally and GOS specifically through this and the prior administration
- Focus has shifted over time to citizen benefits
- Focus further defined by world events on

17 DoD e-Gov Initiatives 25 e-Gov Initiatives

- **Federal Asset Sales: GSA (Managing Partner)**
- **International Trade Processing Streamlining: DoC**
- **Recruitment One Stop: OPM**
- **Consolidated Health Informatics: HHS**
- **Geospatial Information One Stop: DoI**
- **Disaster Management: FEMA**
- **SAFECOM: FEMA**
- **E-Vital: SSA**
- **E-Grants: HHS**
- **E-Training: OPM**
- **Enterprise HR Integration: OPM**
- **E-Clearance: OPM E-Payroll: OPM**
- **E-Travel: GSA**
- **Integrated Acquisition: GSA**
- **E-Records Management: NARA**
- **E-Authentication: GSA**

- **Recreation One Stop**
- **Gov Benefits**
- **~~E-Loans~~**
- **USA Services**
- **EZ Tax Filing**
- **Online Rule Making**
- **Expanding Electronic Tax products for Businesses**

Geospatial One Stop Defined

- GOS initiative is one of 25 major e-government initiatives.

- **Goals** of GOS are to **provide fast, reliable access to geospatial information**; establishment of interoperable data, services and standards; alignment of data responsibilities and resources.

- GOS **accelerates the completion** of essential elements of the **National Spatial Data Infrastructure (NSDI)** over the next 24 months and unifies programs delivering government geospatial initiatives.

NSDI Defined

- NSDI is a government mandated effort led by the Federal Geographic Data Committee, preceding GOS, to improve access and availability of homeland information to US citizens.

- The NSDI assures that spatial data from multiple sources (federal, state, local, and tribal governments, academia, and the private sector) are available and easily integrated to enhance the understanding of our physical and cultural world.

- The NSDI facilitates efficient collection, sharing, and dissemination of spatial data among all levels of government institutions, as well as the public and private sectors, to address issues

NSDI/GOS Differentiated

- GOS includes initial implementation of 7 Framework Themes Subset of NSDI

1. Cadastral: DOI, Bureau of Land Management (BLM);
2. Digital Ortho Imagery: DOI, USGS;
3. Elevation Terrestrial: DOI, USGS Elevation Bathymetric: Co-leaders: DOC, NOAA and USACE;
4. Geodetic Control: DOC, NOAA;
5. Governmental Units: DOC, USCB;
6. Hydrography: DOI, USGS;
7. Transportation: Department of Transportation, Bureau of Transportation Statistics / Transportation (Marine): USACE

- NSDI
  - Incorporates GOS as an initial capability for standards and data/services access.
  - Eventually incorporates 35 or more framework themes including themes such as: Climate; Soils; Vegetation; Public Health.

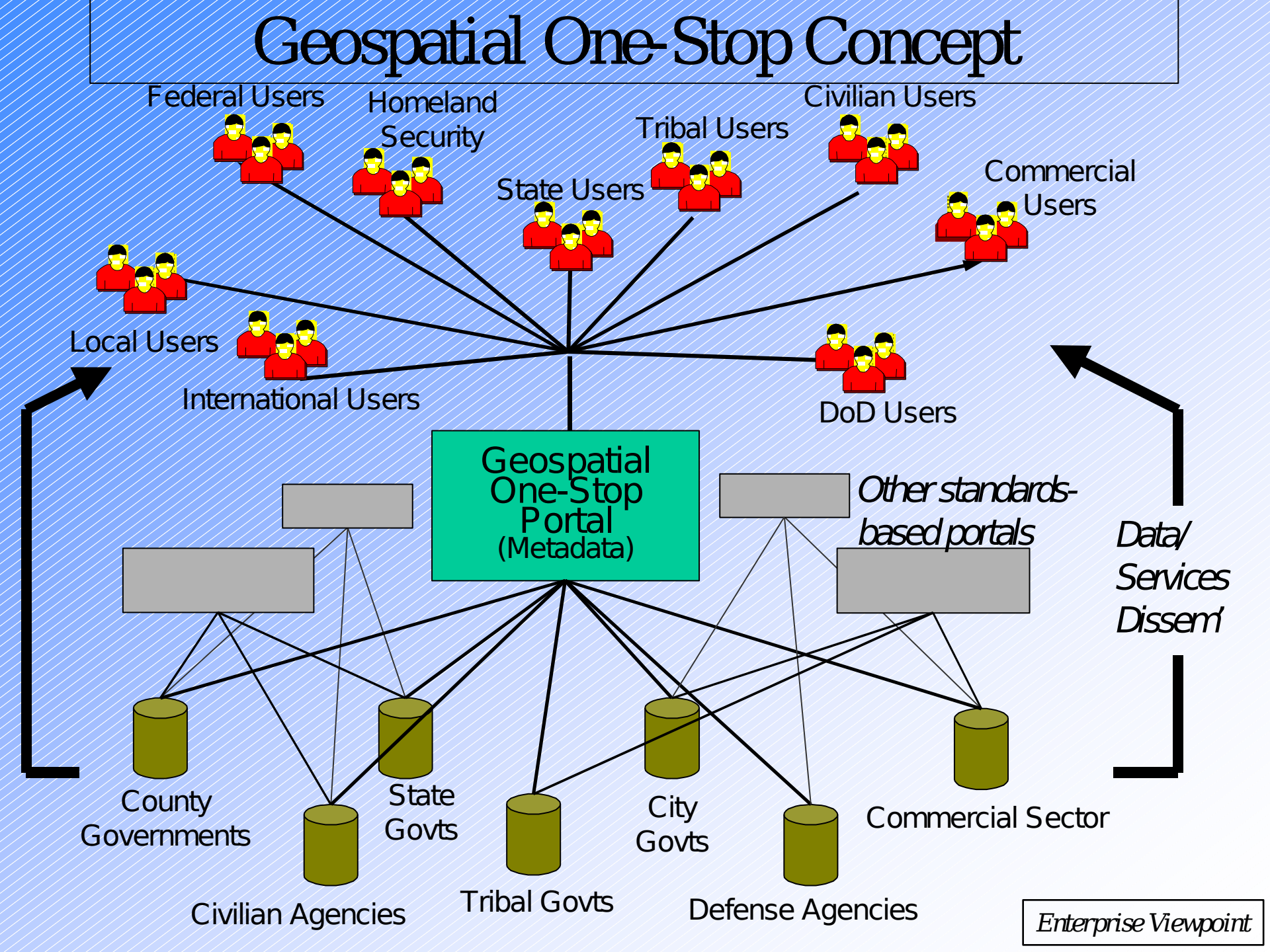
GOS to NSDI Relationship

NSDI

GOS
Initial NSDI Implementation
GOS 5 Modules:
- Module 1 Data standards
7 Framework themes include: Elevation, Orthoimagery, Hydrography, Transportation, Government Units, Cadastral, Geodetic Contr
- Module 2 Inventory existing framework dat
- Module 3 Inventory planned data collection
- Module 4 Establishment mapping and data
- Module 5 Development of information porta

Other NSDI Data Themes
Baseline (Maritime): DOC, NOAA, DOI, MMS
Biological Resources: DOI, USGS
Climate: USDA, NRCS, DOC, NOAA
Cultural and Demographic Statistics: DOC, USCB
Cultural Resources: DOI, NPS
Earth Cover: DOI, USGS
Engineers (USACE) (inland waterways)
Buildings and Facilities: GSA
Federal Land Ownership Status: DOI, BLM
Flood Hazards: FEMA
Geographic Names: DOI, USGS
Geologic: DOI, USGS
Housing: HUD
International Boundaries: DoS
Law Enforcement Statistics: DoJ
Marine Boundaries: DOC, NOAA, DOI, MMS
Offshore Minerals: DOI, MMS
Continental Shelf Submerged Lands: DOI, MMS
Public Health: DoHHS
Public Land Records: DOI, BLM
Shoreline: DOC, NOAA
Soils: USDA, NRCS
Transportation (Marine): USACE
Vegetation: USDA, U.S. Forest Service

Geospatial One-Stop Concept



Geospatial One Stop Defined (Con't)

- Critical government-wide tasks include:
  - Establishing **data content standards** for Framework themes by September 30, 2003
  - Establishing an **operational metadata inventory** of government-wide NSDI data
  - Creating **data acquisition market-place** by publishing metadata for planned data collection
  - Launching the **GOS Web Portal** for data and services.

- GOS Web Portal is being developed as an **initial implementation of the NSDI Clearing-house** network to provide a **"one-stop" access point** to dependable standards-

Why Do It? Benefits of GOS

- Use of one common access point (GOS portal) by Government organizations and citizens to gain knowledge about and access to needed geospatial information will:
  - Avoid redundant cost expenditures due to duplicative data purchases
  - Enable cost sharing among agencies for common geospatial data needs
  - Avoid overhead costs associated with locating and integrating data across disparate information silos
  - Enable the discovery and use of innovative business approaches using geospatial technologies as a foundation
  - Access to common Geospatial services and processes

Why Do It? Benefits of GOS for DoD/NIMA

- For NIMA's domestic Homeland Defense mission
  - Provide rapid efficient access to widely diverse critical U.S. and U.S. Possession data holdings
- For NIMA
  - Avoid redundant cost expenditures.
  - Enable cost sharing among Government agencies.
  - Avoid overhead costs associated with locating and integrating data across disparate information holdings
  - NIMA's data and information responsibilities reduced to the collection and maintenance of sensitive, proprietary or classified data and information.
  - Enable the discovery and use of innovative business approaches using geospatial technologies as a foundation
  - Access to common Geospatial services and processes

NIMA Compliance with OMB Directives

- E-Government initiatives require federal agency participation.
- Direction is documented in the following:
  - OMB Circular No. A-11. Subject: Transmittal Memorandum #75 (06/27/2002) Esp. Section 7 Planning, Budgeting, Acquisition, and Management of Capital Assets and Exhibit 300.
  - OMB Circular No. A-16. Subject: Coordination of Geographic Information and Related Spatial Data Activities.
  - OMB Circular No. A-119. Subject: Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities
  - Precedent, subsequent and derivative directives and guidance.
- MOA between DoD/NIMA and Managing Partner (DOI)
  - Update in work
- Monthly Report from STO through NIMA CIO to OSD CIO for DoD GOS performance.

NIMA's Role

GEO 1 STOP

- Participant for achieving GOS goals and realizing the economies/efficiencies
  - Participate/advise on portal development
  - Post metadata inventories on GOS Portal
  - Connect appropriate NIMA data servers to Geospatial One Stop portal through accepted interoperable web services interfaces
  - Provide data, information and services as appropriate to Geospatial One Stop customers.
  - Use Geospatial One Stop data, information and services to support Office of the Americas Homeland Defense mission.
  - Participate on standards teams for transportation, ortho-imagery, elevation, and hydrography

NIMA Resource Investment

- NIMA Support to Geospatial One-Stop FY03
  - 1.84 Government FTE (1.59 STO; 0.25 PAMH)
  - Monetary investment consistent with GOS Exhibit 300 agreed levels
    - Initially DERF set aside; Changed to supplemental in P FY03
    - 2.1 Contractor FTE
  - Interface development
    - NIMA Gateway Interface (STO / GTD)
    - GeoScout Requirements (STO / AER)
- Interface sustainment and enhancement for out years.
- Inventory of PAM and other NIMA domestic data holdings
- Posting of metadata for releasable data holdings and planned collections

NIMA Budget / Funding

	NIMA GOS FGDC Budget FY03					
	$1,401k DERF/GOS		1,401,000	Notes		
Cash to GOS		525,000				
Indirect support to GOS						
Mitre	0.5 WYrs FY03	188,335				
IntelData	1.5 Wyrs (12mos Apr-Apr)	340,000				
Contract Support for Server	30k (TBD)	30,000				
Gateway	200k (TBD)	200,000				
Homeland Security (TBD)						
			Balance			
	Total	1,283,335	117,665			
Notes: $1450 reduced to $1401 due to "Tax"						
$1401k has been fenced in P for support to GOS / FGDC						

NIMA Personnel

- Primary
  - Mr. Lee Warren, NIMA ETA: DoD/NIMA Representative to GOS. Program / Functional Manager for NIMA interaction with GOS.
  - Mr. Robert Seebald: NIMA PAMH (Homeland Security) Representative to GOS
- Guidance
  - Dr. Scott Loomer, NIMA I: NIMA Geospatial Sciences Advisor / FGDC Steering Committee
  - Ms. Susan Kalweit NIMA PAM: FEMA/NIMA (IGPT. On detail at FEMA. Active in GOS through IGPT role.)

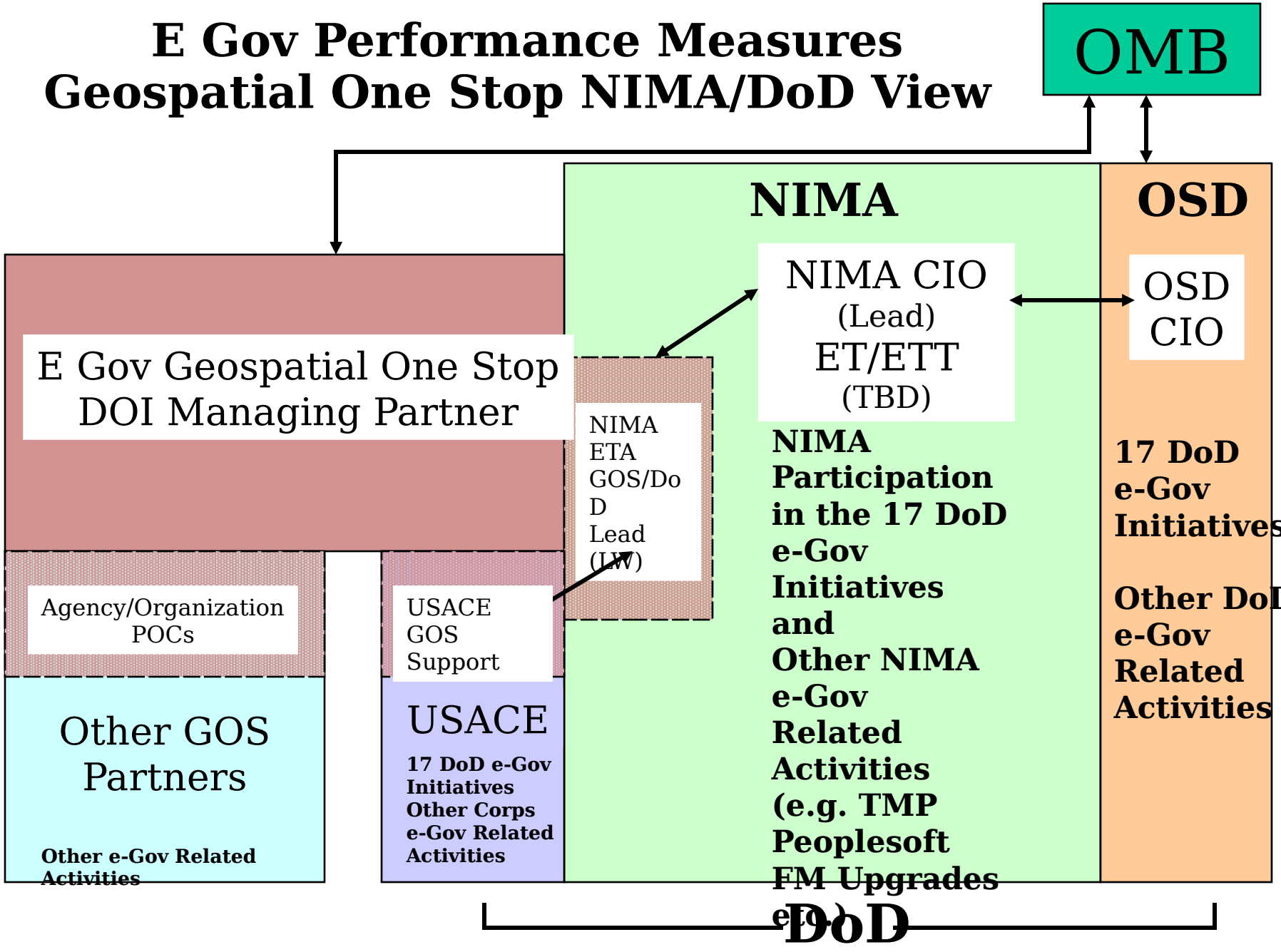
Issues

- **Support from NIMA Management**
  - OIP; Data and information releasability, Liability
  - FM ; Formalize FY04 and FYDP support for GOS
  - PAM(H); Domestic data generation, retention, posting, GOS use
  - GTD; NIMA Gateway I/F to GOS, Data storage and dissemination
  - AER; Inclusion of GOS requirements in GeoScout
  - KCs; Inventory of domestic data current and future
  - CIO; GOS inclusion in NIMA e-Gov performance reporting
  - OGC; Liability
  - InnoVision; Engineering, Prototypes

Issues (Con't)

- **Tech Support Contractor/Government**
  - Contractor. IntelData, BAH, Mitre
  - Government. ETA, GTD, AER, Innovision.
- **Funding**
  - Source FY04 and FYDP (FY03 DERF)

E Gov Performance Measures
Geospatial One Stop NIMA/DoD View



Back Up

- Back Up Slides.

Geospatial One Stop Defined (Con't)

• GOS Development is composed of 5 Modules:
- Module 1 Data standards and cost benefit analysis
- Module 2 Inventory and documentation of existing framework data.
- Module 3 Inventory and documentation of planned data collection.
- Module 4 Establishment of high quality mapping and map data services
- Module 5 Development of an information portal to locate and access data and services.

• 7 Framework themes include: Elevation, Orthoimagery, Hydrography, Transportation, Government Units, Cadastral, Geodetic Control

• GOS Managing Partner is Department of the Interior Deputy Assistant Secretary Scott Cameron. Executive Director Mr. Hank Garie formerly of New Jersey State GIS Office.

NIMA GOS Portal Development Plan

- **Integrate GOS Portal with NIM A Infrastructure**

  - Homeland Security

  - Gateway

  - Security/Releasability

Elements and Approach to Geospatial One-Stop

- Understand Government business needs and applications for geospatial information and technologies
  - Quick survey of State Government CIO's
  - Targeted survey among state, local and federal government representatives
  - Develop strategic direction for project based on business needs and applications
- Implement "one-stop" web portal for Government holdings of geospatial data
  - Begin immediately with initial pilot consistent with strategic direction of project
  - Expand capabilities as data and web services emerge
- Develop & implement data service consistent with business needs and applications
  - Implement basic data service by posting metadata inventories on NSDI-compliant Clearinghouse
  - Develop standard data models for describing Framework themes, implement data models in data servers for each Framework theme
  - Expose data servers and inventories of metadata to portal through web services
- Develop & implement web services standards to enable "one-stop" portal access
  - In partnership with industry, develop standard interfaces for web services needed to enable discovery, access, retrieval and use of geospatial data

NIMA's Role

- Participant for achieving GOS goals and realizing the economies/efficiencies

- Lead parallel effort focused on CIP standards within FGDC Homeland Security Working Group
  - Meta-data inventory
  - Standards development for common data services and consensus agreement on common symbology usage
- Implement Homeland Security "one-stop" portal linked to FGDC Geospatial One-Stop portal through the use of common data and web services (Note: linkage will be done within constraints of data restrictions requirements)

Participating One-Stop Organizations

- Department of the Interior
- Department of Commerce
- Department of Transportation
- *Coast Guard (TBD)*
- National Aeronautics and Space Administration
- U.S. Environmental Protection Agency
- Federal Emergency Management Agency
- Department of Agriculture
- Department of Defense [NIMA Lead, Army Corps of Engineers]
- *Marines (TBD)*
- *NORTHCOM (TBD)*
- Geospatial Information & Technology
- Association (GITA)
- International City/County
- Management Association (ICMA)
- Intertribal GIS Council (IGC)

Participating One-Stop Organizations

- National States Geographic
- Information Council (NSGIC)
- National Association of State
- Chief Information Officers (NASCIO)
- National Association of Counties (NACo)
- National League of Cities (NLC)
- Open GIS Consortium (OGC)
- University Consortium for
- Geographic Information Sciences (UCGIS)
- State Implementation Teams (I-Teams)
- Western Governor's Association (WGA)
- *Department of Treasury (Secret Service)*
- *Department of Energy*

Why Do It? Benefits of GOS for NIMA

- For NIMA's foreign Geospatial Intelligence mission
  - Positive cost and schedule impacts to development and acceptance of interoperable geospatial web services needed for National Geospatial Intelligence System
  - Bonus from standards development to avoid duplicative work